

REMARKS

By this Amendment claims 21, 23-26 and 28 have been canceled. Entry is requested.

In the outstanding final Office Action the examiner has rejected claims 1-21 and 23-28 under 35 U.S.C. §112, first paragraph, because the specification fails to provide support for the new limitation in 1 and 14 that a yield of attack [in dissolving the phosphate of the phosphate ore in the first aqueous solution of hydrochloric acid] is greater than 80% by weight.

However, this rejection must be withdrawn because the noted feature is in fact disclosed in the specification on page 11, lines 21-25. As such, claims 1-13 and 27 should be allowed (no prior art rejections are set forth against these claims).

The examiner has rejected claims 14-21, 23-26 and 28 under 35 U.S.C. §102(b) or 103 (a) as being unpatentable over Loewy et al.

However, the inventors continue to assert that this rejection is without merit (note that claims 21, 23-26 and 28 have been deleted, leaving claims 14-20, which are directed to the method embodiment of Fig. 1).

In the method of claims 14-20 there is effectively no solubilization by HCl of at least part of the precipitated solid phase separated from a

second separation, because this precipitated solid phase is the phosphoric acid salt which is the end product.

Concerning the difference between the claimed process and the method disclosed in Loewy et al., the examiner's attention is directed to page 8, line 12 to page 9, line 28 of the present application. An attack of phosphate ore by diluted HCl acid with a yield of attack greater than 80 % by weight expressed as P₂O₅ is the essential feature of this process. The result of this attack is a liquor containing the greatest possible quantity of phosphate in a dissolved form and an insoluble solid phase which contain mainly impurities.

Such an attack is not disclosed or suggested in Loewy et al.. Effectively, the patent concerns the simultaneous preparation of phosphoric acid and a phosphoric salt in order to minimize any losses of P₂O₅ normally encountered in the attack on rock phosphate by a mineral acid (see col. 2, lines 63-66). During the process a diluted hydrochloric acid may be used because only a part of the phosphate rock is to be attacked (see col. 3, lines 3-9). The aim of this attack is to concentrate P₂O₅ in the solid phase and not to dissolve it in the liquid phase as in the present invention.

During this attack, an excess of phosphate rock will be used in order to cause an upgrade of the P₂O₅ content in the unattacked phosphate rock. The obtained solid phase is thus an enriched phosphate and the

liquid phase contains impurities as well as a little content of phosphate under a dissolved form.

The subsequent steps in claim 14 of the present application, i.e., the first separation, the neutralization and the second separation, correspond to step (b) of claim 1 of Loewy et al. (first separation), step (c) (neutralization of the liquid phase from b)), and the step of filtration disclosed in Loewry et al. in col. 6, lines 57 to 59 (second separation). However, these steps are not applied on the same product. In Loewy et al. they are applied on an aqueous solution having only a little content of dissolved phosphate and the aim is to recover a maximal quantity of P₂O₅ from this solution. In the present invention they are applied on an aqueous solution wherein a concentrated phosphate is dissolved.

In summary, two essential differences distinguish the method according to claims 14-20 from Loewy et al. Firstly, this method intends to prepare only a phosphoric acid salt and is not a combined method of preparation of phosphoric acid + a phosphoric salt; and secondly, the step of attack is completely different (high yield of attack) and has an objective (maximal dissolution of P₂O₅ which is contrary to the aim of the combined method according to Loewry et al. (minimal dissolution of P₂O₅).

It is asserted that the examiner's rejection of claims 14-20 based on Loewy et al. should be withdrawn and those claims allowed with claims 1-13 and 27.

Respectfully submitted,

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